



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Lewin et al.

Serial No.: 10/066,954

Group Art Unit: 3728

Filed: February 4, 2002

Examiner: J. Pickett

For: A METHOD AND APPARATUS FOR THE BULK
COLLECTION OF TEXTURIZED STRAND

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APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
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Sir:

Appeal is taken from the rejection of pending claims 15-18, made final in an Office Action mailed June 20, 2006. No claim has been allowed. A timely Notice of Appeal was filed on October 25, 2006. In the event any fee is due, please debit it from Deposit Account 50-0568.

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I. REAL PARTY IN INTEREST

The inventors assigned 100% of their interest in the present invention as embodied in U.S. Patent Application Serial No. 10/066,954 to the following real party in interest: Owens Corning Fiberglas Technology, Inc. ("Appellant" or "Owens Corning"), an Illinois corporation having a place of business at 7734 West 59th Street, Summit, Illinois 60501.

II. RELATED APPEALS AND INTERFERENCES

Appellant knows of no other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in this appeal.

III. STATUS OF THE CLAIMS

Claims 15-18 remain pending in the application and are the subject of this appeal. Claims 1-14 stand cancelled.

Claims 15-17 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,569,471 to Ingemansson et al. ("Ingemansson"). Claims 15-17 also stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ingemansson in view of U.S. Patent No. 3,398,877 to Mattis ("Mattis"). Claim 18 is rejected under 35 U.S.C. §103(a) as being unpatentable over Ingemansson and Mattis, in further view of U.S. Patent No. 3,670,949 to Galanes ("Galanes").

IV. STATUS OF AMENDMENTS

The form of the claims for purposes of this appeal is as presented in the Amendment document filed April 5, 2006. For the convenience of the Board, a copy of the pending claims appears in the Claims Appendix appended hereto. There are no outstanding un-entered amendments presented after the final Office Action dated June 20, 2006.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 of the present application reads on a package of texturized glass strand. The package comprises a container 30, such as a corrugated box (p. 8, line 3). The container 30 includes a removable closure, such as a flap 38 or 40 or a lid (p. 6, lines 5-11; p. 8, lines 29-31; Figure 4). Disposed in the container 30 is a glass strand 80 having a texturized, coiled form with a density of 5 to 10 lbs/ft³ (p. 5, lines 35-36; p. 8, line 15; Figure 2). Accordingly, the glass strand 80 can be withdrawn from the container 30 for subsequent use when the closure is removed (p. 8, line 2; p. 15, line 14; Figure 2).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The Board must determine whether substantial evidence in the record supports the conclusions reached by the Examiner that: (1) the inventions of claims 15-17 are obvious over Ingemansson, taken alone or in further combination with Mattis; and (2) the invention of claim 18 is obvious in view of Ingemansson and Mattis, in further view of Galanes.

VII. ARGUMENT

A. THE INVENTIONS OF CLAIMS 15-17 ARE NOT PRIMA FACIE OBVIOUS IN VIEW OF INGEMANSSON AND MATTIS

Ingemansson, the primary reference used in rejecting all pending claims, discloses a method of manufacturing a muffler for installation on a vehicle. As alleged by the Examiner, the manufacturing process disclosed by this reference utilizes “glass strands fed into a muffler outer cylinder 14” (Office Action mailed June 20, 2006, p. 2, ¶4, line 3). Citing to col. 3, line 67 to col. 4, line 7 of Ingemansson, the Examiner further asserts that “[a]fter the glass strands have been deposited into the outer cylinder, a cover plate is placed over the opening for transport.” (*Id.* at lines 6-8). This “cover plate” allegedly qualifies as the claimed “removable closure” that allows for the glass strand to be “withdrawn from said container for subsequent use when said closure is removed,” even though the stated purpose of this plate is to “prevent the wool from coming out” before a “lefthand end piece” is welded in place to complete the muffler 13. (*Id.*)

First of all, Appellant respectfully asks the Board to consider the Examiner’s position that Ingemansson is analogous art. According to the Court of Appeals for the Federal Circuit (CAFC), any reference relied upon in support of an obviousness rejection “must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” *In re Oetiker*, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). In evaluating the first prong of this analysis (the “field of endeavor”), the examiner must look to the “function and structure of the claimed invention” in comparison with that of the cited reference. *In re Bigio*, 72 USPQ2d 1209 (Fed. Cir. 2004); *see also In re Deminski*, 230 USPQ 313 (Fed. Cir. 1986) (finding the same “field of

endeavor” when the applied reference had “essentially the same function and structure.”). If “common sense” dictates that the function and structure are simply not the same, then a proper obviousness rejection cannot lie under this first prong of the test.

Appellant’s invention as set forth in claim 15 comprises a package of texturized glass strand. Importantly, this package comprises a container having a **removable closure**. Consequently, the glass strand disposed in the container in a texturized, coiled form can be withdrawn from the container for subsequent use when the closure is removed.

Nowhere does Ingemansson even remotely teach or suggest any type container with a removable closure for withdrawing textured glass strand for subsequent use. Rather, Ingemansson is concerned with placing wool directly into a muffler 13 to **eliminate** the need for independent storage and transport of the wool, rather than placing it into a container with a removable closure for these same purposes. Accordingly, the “function and structure of the claimed invention” is completely different from that of the prior art. “Common sense” thus dictates that the claimed invention and that of Ingemansson are simply not the same.

Turning to the alternative second prong of the analysis, Ingemansson is also not “reasonably pertinent to the particular problem” concerning the Appellant. Appellant’s invention addresses a need that “exists for an inexpensive way to collect texturized strand so that it can be pulled from the container in which it is collected” (p. 2, lines 14-16 of Appellant’s specification). In stark contrast, Ingemansson states that, “[t]he purpose of the present invention is to achieve a container filled with fiberglass wool, especially a muffler for combustion engines, which has **improved mechanical properties** over said known mufflers” (col. 1, lines

32-33; emphasis added). According to Ingemansson, “[o]ne of the primary advantages is that the wool is first formed when it is blown into the container, thus eliminating the need for bulky storage and transport means for the wool” (col. 1, lines 63-66; emphasis added).

Ingemansson is thus merely concerned with manufacturing a muffler, and is in no way pertinent to the problem Appellant seeks to solve (namely, an inexpensive way to collect texturized strand so that it can be pulled from the container in which it is collected). Indeed, no way to “withdraw” the wool of Ingemansson is even identified. Accordingly, this reference is simply not from the same field of endeavor as the invention of claim 15.

A strikingly similar situation was addressed by the CAFC in the case of *In re Oetiker, supra*. In that case, the applicant claimed an improvement in a hose clamp that included a “hook.” Relying on a reference disclosing a hook and eye fastener for use in garments, the examiner reasoned that all “hooking” problems are analogous. In reversing the rejection and holding the reference non-analogous, the CAFC found that the examiner failed to adequately show that a person seeking to solve a problem of fastening a hose clamp would be expected or motivated to look to fasteners for garments.

Similarly, it is undoubtedly the case that Appellant’s invention relates to glass strands, and such are well known in the art (even for use in mufflers; see Appellant’s specification, page 2, lines 5-6). However, it does not logically follow that all references mentioning glass strands and containers for receiving them necessarily comprise art analogous to Appellant’s invention. In combining references relating to the use of glass strands in mufflers, in which the primary concern is permanently securing

the strands in place so as to avoid the need for packaging all together, the Examiner not only appears to define the problem too broadly, but also completely fails to recognize the issue identified and resolved by the Appellant's innovation. *Ex parte Dussaud*, (No West Cite), 7 USPQ2d 1818 (Bd. Pat. App. & Int. 1988) ("Precise definition of the problem is important in determining whether a reference is from a nonanalogous art. . . . [D]efining the problem too broadly . . . may result in considering prior art as 'analogous' which is inconsistent with real world considerations."). This understandably leads to wayward conclusions and concomitant obviousness rejections that simply cannot be sustained based on the cited reference.

Upon correctly considering the problem resolved by the Appellant's invention, it is believed that Ingemansson would not be within the purview of a skilled artisan attempting to find a solution, consistent with "common sense" and "real world considerations." See *In re Bigio*, *supra* ("this court has previously 'reminded . . . the PTO that it is necessary to consider 'the reality of the circumstances' -in other words, common sense - in deciding in which fields a person of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor."). Therefore, reconsideration of the finding that Ingemansson is analogous art is respectfully requested.

Even if the Board finds Ingemansson is properly citable, the situation nevertheless remains that this reference, whether taken alone or in combination with Mattis, does not render the claimed inventions obvious. As noted above, claim 15 expressly requires a container having a "removable closure." The Examiner contends that Ingemansson meets this requirement, since the claimed "removable closure" allegedly qualifies as

the “cover plate.” However, this “cover plate” is undeniably to “prevent the wool from coming out during transport” (see col. 4, lines 6-7). Removal of this closure to withdraw the wool is never mentioned.

Furthermore, a welded end piece of a muffler 13 cannot qualify as the “removable closure” of claim 15, even giving the term “removable” its broadest reasonable interpretation in accordance with the specification, as the law requires. *See, e.g., Dorel Juvenile Group Inc. v. Graco Children's Products Inc.*, 77 USPQ2d 1090 (Fed. Cir. 2005) (upholding that the claim terms “removably attached” and “removably secured” “carry with them an implication that the detachment or unsecuring process not do violence to the [underlying structure].”). Since “violence” to the underlying muffler 13 is undoubtedly required to remove this closure in Ingemansson, this reference simply does not teach or suggest a limitation of the claimed invention (nor would it *per se* possibly motivate a skilled artisan to arrive at the same). Since both are requirements for a *prima facie* case of obviousness, the rejection of claim 15 over Ingemansson alone must be reversed.

In contending otherwise, the Examiner posited “the strand of Ingemansson is inherently capable of being removed for subsequent use since Ingemansson lacks any permanent fastening means” (Office Action mailed June 20, 2006, p. 3, lines 1-2). Appellant respectfully submits that this statement simply does not provide a proper basis for a *prima facie* obviousness rejection under well-established concepts of patent law. Specifically, a finding of inherency requires that it is “necessarily” the case that the cited condition results. *Scaltech, Inc. v. Retec/Tetra, LLC.*, 178 F.3d 1378, 1384, 51 USPQ2d 1055, 1059 (Fed. Cir. 1999) (“An inherent limitation is one that is necessarily present”). The Examiner here provides no

convincing line of reasoning as to why it is “necessarily” the case that the strand in Ingemansson can be removed from the muffler 13 for subsequent use. The “mere possibility” that such may be the case, which is what the Examiner seems to assert, is simply insufficient to support a finding of inherency. *Id.*

The Examiner’s position also disregards the legal truism that “[i]nherency and obviousness are distinct concepts.” *Kloster Speedsteel AB, et al. v. Crucible Inc.*, 713 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986). As observed by the court in *In re Newell*, 891 F.2d 899, 13 USPQ2d 1248 (Fed. Cir. 1989):

That which may be inherent is not necessarily known. Obviousness cannot be predicated on what is unknown. There is no suggestion or motivation in the prior art to combine these elements as combined by [the inventor]. . . . The motivation to make a specific structure “is not abstract, but practical, and is always related to the properties or uses one skilled in the art would expect the [structure] to have, if made.”

(citing *W. L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 1555, 220 USPQ 303, 314 (Fed. Cir. 1983) and *In re Sporman*, 363 F.2d 444, 448, 150 USPQ 449, 452 (1966), *cert. denied*, 105 S. Ct. 172 (1984)). One confronting the “structure” (muffler 13) of Ingemansson would not “expect” it, if made, to include a removable closure to allow for subsequent use of the contents. No substantial evidence in the record supports the conclusion that such use is expected. Thus, even if the strand in Ingemansson is “inherently capable of being removed” as asserted by the Examiner, this does not make it known to provide a removable closure on a container for a coiled, texturized glass strand, or otherwise mean that a skilled artisan would be motivated to arrive at the invention of claim 15.

In an effort to support his position, the Examiner cites to *Ex parte Masham*, 2 USPQ2d 1647 [No West Cite] (Board of Patent App. & Int. 1987) for the proposition that “the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations” (Advisory Action mailed August 29, 2006). However, *Masham* dealt expressly with an anticipation rejection, not the distinct legal concept of obviousness. Moreover, this decision has never been cited or followed in any precedential decision issued by this Board.

A contemporaneous decision more inline with the present facts is *In re Stencel*, 828 F.2d 751, 4 USPQ2d 1071 (Fed. Cir. 1987). The CAFC in *Stencel* observed as follows:

There is an extensive body of precedent on the question of whether a statement in a claim of purpose or intended use constitutes a limitation for purposes of patentability. Whether a[n] . . . intended purpose constitutes a limitation to the claims is, as has long been established, a matter to be determined on the facts of each case in view of the claimed invention as a whole. The test in determining whether a claimed invention would have been obvious is what the combined teachings of the references would have suggested to one of ordinary skill in the art.

Id. at 1073. Based on this statement, the court held that the inventor “is not inhibited from claiming his [invention] . . . , *limited by the statement of its purpose*, and further defined by the remaining clauses of the claims at issue, when there is no suggestion in the prior art of [the invention] . . . having the claimed structure and purpose.” Accordingly, the obviousness rejections affirmed by the Board were reversed.

This decision is precisely on point with the present situation. Nothing at all in Ingemansson that suggests a package for a texturized, coiled glass strand comprising a container with a removable closure to allow the strand to be withdrawn from the container. Indeed, everything in the cited reference is about preventing the wool from escaping from the muffler 13, rather than allowing it to be removed for subsequent use. Hence, it cannot be said that Ingemansson suggests both the claimed structure and purpose of the invention of claim 15.

The Examiner also admits that Ingemansson “does not expressly disclose the density of the glass strand within the container” (Office Action mailed June 20, 2006, p. 3, lines 5-6). Despite this shortcoming, it is nevertheless posited that “it would have been an obvious matter of design choice . . . to provide the glass strand in the claimed densities because applicant has not disclosed that the specific density provides an advantage, is used for a particular purpose, or solves a stated problem” (*Id.* at lines 6-9). This generalization again misses the point of the claimed invention, which is to package texturized, coiled glass strands into a container having a removable closure. The claimed densities are relevant because they demonstrate that Appellant’s invention is a package of texturized glass strands for later use, and thus have a density as packaged that different from that created through further processing prior to use, such as in a muffler. No substantial evidence in the record supports any possible conclusion that the wool used in the muffler of Ingemansson is of a comparable density and, in fact, Appellant has submitted evidence that this wool is actually without the claimed range (see *Exhibit A*). Accordingly, a *prima facie* case of obviousness is lacking for this additional reason.

The Examiner attempts to supplement the obviousness rejection of claim 15 based on Ingemansson *per se* by citing the secondary Mattis reference. However, the Ingemansson reference actually teaches directly away from the invention of the Mattis reference by expressing a preference for avoiding the need for storage and transport of glass strands. Thus, the Examiner's position that it would have been obvious to "provide the glass fibers of Ingemansson in a package as taught by Mattis for storage and transport" (Office Action mailed June 20, 2006, p. 4, lines 13-15) completely disregards that the references actually teach away from each other and thus constitutes reversible error. *See In re Grasselli*, 713 F.2d 731, 218 USPQ 769 (Fed. Cir. 1983) (finding that it is improper to combine references where the references teach away from their combination). Stated another way, there is nothing in the patents themselves or any other substantial evidence cited by the Examiner providing the requisite motivation or suggestion that supports the proposed combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984) ("[e]lements of separate prior patents cannot be combined when there is no suggestion of such combination anywhere in those patents."). Accordingly, the obviousness rejection of claim 15 and dependent claims 16-17 based on the combination of references cited must be reversed.

**B. THE INVENTION OF CLAIM 18 IS NOT PRIMA FACIE OBVIOUS
IN VIEW OF INGEMANSSON, MATTIS, AND GALANES**

In rejecting claim 18, which requires that the container of claim 15 comprises a corrugated box, the Examiner cites to Galanes for its teaching that corrugated cardboard is a suitable material for cartons. Not only does this tertiary reference in no way rectify the missing teachings of Ingemansson and Mattis, but it is also not properly cited in the

combination. As with Mattis, Galanes teaching of a carton is in direct contradistinction to the expressed desirability of Ingemansson to obviate the need for storage and transport of the glass strands for subsequent use. Accordingly, a *prima facie* case of obviousness is lacking with respect to claim 18 as well.

C. CONCLUSION

As stated in *W.L. Gore & Associates, Inc. v. Garlock, Inc., supra*, “[t]o imbue one of ordinary skill in the art with knowledge of the invention [under consideration], when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.” That is precisely what has occurred here, since no substantial evidence in the record provides the requisite motivation or suggestion to make the claimed container for a texturized glass strand having a removable closure, or otherwise supports the obviousness of the claimed inventions. Thus, upon careful review and consideration it is believed the Board will agree and find the inventions of claims 15-18 patentable over the cited prior art.

Respectfully submitted,

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VIII. CLAIMS APPENDIX

The claims on appeal read as follows:

15. A package of texturized glass strand comprising:

a container having a removable closure;

a glass strand disposed in said container in a texturized, coiled form, wherein said glass strand can be withdrawn from said container for subsequent use when said closure is removed, wherein said glass strand in said texturized, coiled form has a density of 5 to 10 lbs/ft³.

16. The package of claim 15, wherein said glass strand has the coiled form substantially along its length in said container.

17. The package of claim 16, wherein said glass strand is disposed in said container in a series of layers.

18. The package of claim 15, wherein said container is a corrugated box.

IX. EVIDENCE APPENDIX

Appellant attaches for the convenience of the Board *Exhibit A*, which is a copy of an excerpt from Wang, Handbook of Air Conditioning and Refrigeration, McGraw-Hill (2d ed. 2001) that accompanied Appellant's response to a non-final Office Action received by the PTO on January 30, 2004.

X. RELATED PROCEEDINGS APPENDIX

None

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TABLE 3.3 Thermal Properties of Selected Materials

	Density, lb/ft ³	Thermal conductivity, (Btu/h · ft · °F)	Specific heat, (Btu/lb · °F)	Emissivity
Aluminum (alloy 1100)	171	128	0.214	0.09
Asbestos: insulation	120	0.092	0.20	0.93
Asphalt	132	0.43	0.22	
Brick, building	123	0.4	0.2	0.93
Brass (65% Cu, 35% Zn)	519	69	0.09	0.033 Highly polished
Concrete (stone)	144	0.54	0.156	
Copper (electrolytic)	556	227	0.092	0.072 Shiny
Glass: crown (soda-lime)	154	0.59	0.18	0.94 Smooth
Glass wool	3.25	0.022	0.157	
Gypsum	78	0.25	0.259	0.903 Smooth plate
Ice (32°F)	57.5	1.3	0.487	0.95
Iron: cast	450	27.6	0.12	0.435 Freshly turned
Mineral fiberboard:				
acoustic tile, wet-molded	23	0.035	0.14	
wet-felted	21	0.031	0.19	
Paper	58	0.075	0.32	0.92
Polystyrene, expanded, molded beads	1.25	0.021	0.29	
Polyurethane, cellular	1.5	0.013	0.38	
Plaster, cement and sand	132	0.43		0.91 Rough
Platinum	1340	39.9	0.032	0.054 Polished
Rubber: vulcanized, soft	68.6	0.08	0.48	0.86 Rough
hard	74.3	0.092		0.95 Glossy
Sand	94.6	0.19	0.191	
Steel (mild)	489	26.2	0.12	
Tin	455	37.5	0.056	0.06 Bright
Wood: fir, white	27	0.068	0.33	
oak, white	47	0.102	0.57	0.90 Planed
plywood, Douglas fir	34	0.07	0.29	
Wool: fabric	20.6	0.037		

Source: Adapted with permission from ASHRAE Handbook 1989, Fundamentals.

The equilibrium moisture content of most commonly used insulation material at 90 percent relative humidity ambient air, as well as the moisture content of insulation material at 80 percent TRR by weight (percent of dry weight) and by volume (percent of volume of insulating material) are listed below:

Insulation material	Density, lb/ft ³	$\phi = 90\%$	Moisture content, %	
			80% TRR, by weight	80% TRR, by volume
Cellular glass	8.4	0.2	23	3.1
Expanded polystyrene	1.0	2.0	383	6.1
Glass fiber	9.2	1.1	42	6.2
Urethane	2.1	6.0	262	8.8
Phenolic foam	2.6	23.4	25	1.0

For instance, for cellular glass when in contact with an ambient air of 90 percent relative humidity at normal room temperature that reaches an equilibrium state during moisture absorption, it has

HANDBOOK OF AIR CONDITIONING AND REFRIGERATION

Shan K. Wang

Second Edition

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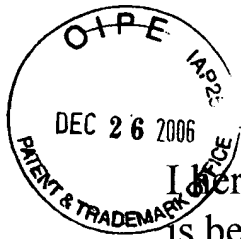
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